

A Modal-Epistemic Argument for the Existence of God

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Abstract

This paper presents a deductive modal-epistemic argument for the existence of God. God is defined in the paper as a person that is the first cause of reality. The argument consists of two premises: (i) For all propositions p , if p is unknowable, then p is necessarily false, and (ii) It is impossible to know that God does not exist. From (i) and (ii) it follows that it is necessarily true that God exists. A justification for both premises is provided. After that ten different objections to the argument are presented and subsequently refuted.

Introduction

Take the following modal-epistemological principle, connecting possible worlds¹, knowledge and truth: 'If it is metaphysically impossible to know p ², then p is necessarily false'. This principle seems cogent. For, if a given proposition p could be true, then, plausibly, there is some possible world in which some subject in fact knows that p is true.

¹ In what follows the S5 system of modal logic is assumed, that is, it is taken that every possible world is accessible from any other, which is a valid assumption in the case of *metaphysical* possibility. For, in metaphysics we are concerned with what is actualizable *simpliciter*, that is, with what could obtain *at all*.

² Some given proposition p is *metaphysically unknowable*, or, in short, unknowable, if and only if there is no logically possible world W and no subject S such that S knows p in W . That is to say, a proposition is unknowable just in case there is no possible world in which that proposition is known. Moreover, it is quite important to note that 'subject' does not refer only to *human* persons. 'Subject' refers to *any possible type* of agent or actor capable of knowledge, or, more precisely, capable of knowing at least one proposition.

In other words, if in *all* possible worlds *all* subjects do not know that some proposition p is true, then, plausibly, that is because that very proposition, p , cannot in fact be true. So, if some proposition p cannot be known in the actual world, and not in possible worlds quite similar to the actual world, and not in possible worlds distinct from the actual world, and not even in possible worlds that are radically different from the actual world, then it seems plausible to conclude that p is in fact not true. The principle expresses a commitment to the idea that reality in itself is ultimately intelligible, i.e. amenable to understanding or knowable. This commitment seems to be necessary for doing metaphysics. For, if the world is ultimately not intelligible, or, to put it differently, if what is metaphysically ultimate is not intelligible, then why think about metaphysics? Indeed, one can consider my proposed principle as being a formalized modal-logic rendering of a plausible necessary condition for doing metaphysics, i.e. the intelligibility of reality³. Moreover, the claim that all possible truths are knowable has a very high confirmation and corroboration rate. It holds for example of all our everyday assertions and all propositions present in our best scientific theories. And of course the principle that reality itself is ultimately intelligible, that is, that all possible truths are possibly known, is only plausible if we take into account what people *and all other metaphysically possible actors, either human or non-human, in all metaphysically possible worlds* can know. For, the essence of the principle is that it is reasonable to hold that every possible truth is always at least somewhere possibly known, in our world, in some similar possible world or in a radically different possible world. And this is indeed the case for all our everyday and scientific assertions. So, why would there, given that reality is ultimately

³ I thank D. Georgoudis for this way of expressing the basic intuition behind the principle.

uniform and not arbitrary, be suddenly some “very special truths” for which the principle does not hold? This is not plausible. Because of this reason and the aforementioned considerations I take it that the principle can be reasonably accepted⁴.

Now, on a Cartesian view of knowledge, that is, to know p is to be certain⁵ that p is true, the above principle has an interesting consequence. For, take for p the proposition 'God⁶ does not exist'. In this proposition and in what follows 'God' is understood as 'personal

⁴ In fact, since at least Parmenides many ancient philosophers accepted the core idea expressed by the principle. Aristotle is a well-known example. He holds that reality is essentially intelligible, that there is a strict parallelism between reason and being, that 'being' and 'being-known' are extensionally equivalent. And this is precisely what the principle affirms: all truths are knowable. In addition to ancient thinkers such as Parmenides and Aristotle, also philosophers from the modern area would agree with the principle. For example transcendental idealists, or G.W.F. Hegel who famously proclaimed the intrinsic intelligibility of being: “What is reasonable is real; that which is real is reasonable”. Contemporary worldviews committed to the principle include, but are not limited to, various forms of internal realism and neo-Aristotelianism.

⁵ Note that the certainty, as intended here, does not have to be *absolute*. It is not the case that a subject S must conclusively logically eliminate each and every *extremely remote skeptical non-P scenario* for having Cartesian knowledge that P. In order for S to have Cartesian knowledge that P it is sufficient that P is true and S is in an ideal epistemic situation regarding P, i.e., S cannot else but believe P. It would be self-denial for S to hold that S doesn't believe P. Hence, S has Cartesian knowledge that P if and only if P is intuitively self-evident for S or S has an incorrigible experience that P. So, *absolute* certainty is indeed not required.

⁶ Here and in what follows God is defined as 'personal first cause'. That is, God is an uncaused personal being that is the indirect or direct cause of everything else that exists. This definition is logically consistent. Note that this definition doesn't require God to be omniscient, omnipotent or omnipresent. It also doesn't require that God exists necessarily or that God is all-good. Yet, as discussed before, a cogent argument for a personal first cause is surely sufficient to refute naturalism and atheism, and to warrant (bare) theism.

first cause'. It seems reasonable to hold that it is impossible to know that God does not exist. For, whatever the arguments against the existence of God, there will always remain some non-neglectable epistemic possibility that God does exist after all, so that we can never truly say, on the Cartesian view of knowledge, that we know that God does not exist. But then, by taking the earlier mentioned principle into account, it follows that it is necessarily false that God does not exist. Hence, it is necessarily true that God exists. The aforementioned principle, combined with the claim that it is impossible to know that God does not exist, thus supports⁷ bare theism:

1. For all p , if p is unknowable, then p is necessarily false (*first premise; the principle*),
2. The proposition 'God does not exist' is necessarily unknowable (*second premise*),
3. Therefore, 'God does not exist' is necessarily false (*from both premises*)
4. Therefore, necessarily, God exists (*conclusion; from (3)*).

Further, I take it that, reasonably, the *prior* plausibility of the premises (1) and (2) of my argument is higher than the *prior* plausibility of the proposition that God necessarily exists, which, I would say, makes the argument relevant for the debate between theists and atheists. Now, is this argument for a personal first cause sufficiently convincing? In the rest of this paper I shall present and refute ten different objections against it. Until and unless other objections are proposed and shown sufficiently convincing, I take it that the argument is cogent, and as such at least raises the likelihood of theism over atheism.

⁷ Strictly speaking it does not *entail* bare theism if it is assumed that bare theism includes the claim that God has (one or more of) the 'omni'-attributes, such as omniscience, omnipotence or omnipresence.

#1

The atheist might object that it is also impossible to know that God exists. And thus, by similar reasoning, it would follow also that it is necessarily true that God does not exist. However, I would argue that there is a possible world in which some subject can truly say that he or she knows that God exists. Take a possible world in which God exists⁸ and in which there is an afterlife, such that all who enter the afterlife in that possible world will encounter the divine. In that case, those subjects who enter the afterlife will in fact know that God exists. So, it is not impossible to know that God exists. Note that a similar move to reject the argument is not open to the atheist. For, if God doesn't exist, then, plausibly,

⁸ One might think that taking a possible world in which God exists begs the question since it seems to be that by doing so I appeal to God's existence to show that God exists. However, I'm not appealing to God's existence. For, my appeal to the mere logical *possibility* of there being a God is not the same as assuming that God *actually* exists. Let me clarify this. I claim that it is *logically possible* for God to exist. That is, I'm claiming only that there is a possible world, either the actual world ('our world') or another possible world, in which God exists. For, even if God does not exist in the actual world, it would still be true, given that the concept of God (personal first cause) is consistent, that there is another non-actual logically possible world in which God exists. Thus, I am not assuming that God *actually* exists. Indeed, such an assumption would surely render the argument circular. It would be a clear case of begging the question. Further, as mentioned, the argument does not rely on the claim that God is by definition a necessary being. Hence my appeal to the mere logical possibility of God's existence does not reduce the argument to the ontological argument.

there is no afterlife⁹. And besides, even if there would be an afterlife, then entering it would not bring a subject in the epistemic condition of knowing that God does not exist.

#2

The atheist might reject my response to the first objection. After all, someone could, even encountering God in the afterlife, believe that he or she is dreaming, or hallucinating, or being deceived. Therefore, on the Cartesian view of knowledge, it is impossible to know that God exists after all. But then, given my modal-epistemic principle, it also follows that, necessarily, God does not exist. And thus the proposed argument fails. My response would be that even if someone could think that he or she is dreaming, hallucinating or being deceived, it still does not follow that God's existence is unknowable. For, take a possible world in which God exists. In such a possible world there is a subject that knows that God exists, namely God. Indeed, in that world God knows that God exists. So, it is not impossible to know that God exists¹⁰.

#3

The main principle on which the argument for theism is based can be formulated as: 'If p

⁹ Note however that we cannot *logically* exclude the metaphysical possibility of there being an afterlife without God. After all, an atheistic substance dualist might want to argue that the human mind can exist separately from the human body, so that an afterlife without God remains a metaphysical possibility.

¹⁰ Note that we do not have to affirm that God knows to be God in *all* metaphysically possible worlds in which God exists. For, it is sufficient for there to be *at least one* metaphysically possible world in which God exists and in which God knows to be God, which is surely a reasonable given that God, being the ultimate ground and origin of being, is in an maximally ideal epistemic situation regarding its own nature. Besides, in order to know this nature God doesn't have to reach out beyond its own condition of existence.

is possibly true, then p is knowable'. This principle entails that every truth¹¹ is knowable. But from that, as Fitch has shown in his 1963 paper 'A Logical Analysis of Some Value Concepts', it can be logically deduced that every truth is in fact known! An atheist might reason that this is a highly problematic, if not absurd, consequence. Thus, as the atheist would have it, the proposed argument is not convincing and should be rejected¹².

I would respond as follows. Now, it is indeed the case, following Fitch, that the principle entails that every truth is in fact known (call this consequence T). But why hold that T is false? After all, for all we know, there might be an omniscient being in the actual world knowing all truths. So, even though T does seem problematic for atheism, it does not follow that T is false. It would be begging the question for the atheist to deny T solely because T does not fit with atheism and favors theism (since the theist can hold that God knows all truths). Indeed, the fact that my principle entails T is not sufficient to reject it. For, it would be unreasonable for the atheist to initially accept the principle as plausible (which I would contend it is), but then, when it becomes clear (after a quite complex non-trivial deduction) that it has a consequence unpleasant for atheism, to reject the principle.

Nevertheless, the atheist could insist that she has actually offered a *reductio ad absurdum* of my principle. After all, if we combine my principle with Fitch's result, we arrive at a conclusion that is way too absurd for atheists to accept, namely that all truths in the actual world are known. I would reply to this as follows. First, I provided some intuitive support for the principle. The atheist can therefore only reasonably reject the principle if she also

¹¹ More specifically, every *actual* truth, that is to say, every proposition that is true *in the actual world*.

¹² This objection was suggested to me by Alexander Pruss.

argues why this intuitive support for it is not convincing. And for doing that the alleged reductio is surely not sufficient. Second, and much more importantly, the reductio offered by the atheist, if accepted, does in fact not show that my modal-epistemic principle fails. It only shows that the *conjunction* of this principle and Fitch's result fails. Hence, for the atheist to arrive at her desired conclusion that my principle fails, she has to accept Fitch's result. However, I argue below that Fitch's result cannot reasonably be accepted, neither by atheists nor by anyone else. Thus the proposed reductio of my principle fails after all.

To begin with, let us notice that Fitch's proof, that is, if all truths are knowable, then all truths are known, is highly counterintuitive. In fact, it is not merely counterintuitive, but truly paradoxical. It should therefore not surprise us that Fitch's proof is referred to in the literature as the *Knowability Paradox*. Its fundamental paradoxical character stems from the fact that it is undeniably absurd to believe that the mere possibility that all truths *can* be known already entails that all truths are in fact *actually* known. Fitch's proof leads to a collapse of the obvious and clear difference between *possible* knowledge of all truths and *actual* knowledge of all truths, which is seriously disturbing. As Kvanvig points out: 'the idea that there is no distinction between knowable and known truth [...] is too much to ask' (Kvanvig 2006, p. 205). Therefore, like any other deep paradoxical result, we should *only* accept Fitch's proof if there is no reason to doubt whether this proof holds. And this is not the case at all. There is a good reason to doubt whether Fitch's proof is valid. In the introduction of his thorough book on Fitch's Paradox of Knowability Kvanvig argues: 'I pursue [...] a strategy for solving the knowability paradox in terms of the general category of the fallacies involved in substituting into intensional contexts. It is well known that such substitutions are not always valid: from the fact that Clark Kent is

Superman and that Lois adores Superman, one can't infer she adores Clark; and from the fact that 9 is the number of planets, we can't infer that the number of planets is necessarily greater than 7 simply because 9 is necessarily greater than 7. [...] [W]hen we examine the logical details of the paradox, it involves substitutions into intensional contexts as well, and that fact should alert us to the possibility that the substitution is illicit.' (Kvanvig 2006, p. 4). Kvanvig's strategy is to demonstrate that Fitch's proof amounts to a substitution into a modal context, and might therefore be a modal fallacy. This lack of trust in the validity of the proof gives us enough reason, given the proof's huge paradoxical implications, not to accept it. Thus, after Kvanvig the burden of proof has shifted again to the proponents of Fitch's result. For they now must argue why Fitch's proof is not just another example of a failure of substitutivity in intensional contexts. And a well-known attempt of Williamson (2000) to do so has been extensively addressed and finally rejected by Kvanvig (2006). Besides, Kvanvig does much more than raising sufficient doubt on Fitch's proof. In his book he develops a so-called neo-Russellian treatment of quantification that does actually entail that Fitch's proof is indeed a special instance of an invalid substitution into a modal context. His neo-Russellian notion of quantification shows that the substitution in Fitch's proof is in fact mistaken, by enabling us to explain precisely why it is a failure of modal substitutivity. Thus, *if* we accept Kvanvig's neo-Russellian treatment of quantification, it follows that Fitch's proof is not only doubtful, but indeed actually invalid. It goes beyond the scope of this paper to present the neo-Russellian notion of quantification¹³. Enough has been said to see that

¹³ Kvanvig's neo-Russellian treatment of quantification is not an ad-hoc proposal. It is akin to the Kripkean treatment of names as terms that 'reach out directly into the world' without such reach being mediated by a

Fitch's proof is simply too doubtful to reasonably accept, which concludes my refutation of the second objection.

#4

Another objection would perhaps be to argue that there might be some true mathematical Gödel sentence G that cannot be proven by any proper mathematical system. Hence, G is unknowable. But then not all truths are knowable, and therefore my principle (which entails that all truths are in fact knowable) fails. My response would be that G *is* in fact knowable. For, there is a possible world in which G is known. Take again a possible world in which God exists and in which God's direct mathematical intuition is perfect. In this possible world God can be taken to know all logico-mathematical truths immediately by direct intuition¹⁴, and therefore God knows G as well.

definite description. The neo-Russellian notion of quantification holds 'that the connection between the quantifier and the domain of quantification is unmediated' (Kvanvig 2006, p. 5). In the neo-Russellian treatment of quantification the domain of quantification does not 'enter the picture at a later semantical stage, the stage at which an evaluation of the truth-value of the proposition expressed is calculated' (2006 p. 5). In other words, the neo-Russellian view of quantification 'proposes that modal contexts introduce the need to tie the domain more closely to the thought expressed by a quantified sentence.' (p. 203).

¹⁴ Let me briefly clarify this statement. We know for example by immediate intuition that 'a=a' or that something cannot both have and lack a certain property at the same time in the same way. Both truths are for us self-evident and therefore part of our knowledge under the Cartesian view. Now, the difference between us and God existing in the possible world in question, is just that for God in that world not only these two truths, but in fact all logico-mathematical truths (including Gödel's theorem itself) are wholly self-evident, and therefore, on the Cartesian view of knowledge, part of God's knowledge in that world. Further, notice that knowing all logico-mathematical truths does not have to be an essential property of

#5

Let p be the proposition that there are no unicorns. Now, one could propose the following parody of my argument. Whatever the arguments against *not-p*, there is always some non-neglectable possibility that unicorns do exist after all, so that, on the presumed Cartesian view of knowledge, we can never truly say that we *know* that unicorns do not exist. Hence, according to the presumed modal-epistemic principle, it is necessarily true that there are unicorns. But this is clearly absurd. And hence that principle must be false.

Let me respond to this objection. Take a possible world W_I in which (i) intelligent agents exist, (ii) space-time is relatively limited in extent, and (iii) physics and technology are extremely advanced. In this world it might be the case that intelligent agents are able to scan the whole of space-time for specific objects. In that world one would then be able to establish that there are no unicorns. Or, alternatively, suppose the intelligent agents in question are able to establish that the planet they live on is the only location in space-time that allows for life. Let us also suppose that their physics and technology are so advanced that they are able to scan their entire planet for there being unicorns. In that case they would be able to know that there are no unicorns. So it is not impossible to know that there are no unicorns. But then my principle doesn't apply. One may reply that, under the Cartesian view, these agents still don't *know* that unicorns do not exist. For, they cannot sufficiently rule out the possibility that the scanner they use is not broken, that they didn't

God. That is to say, there might be many other possible worlds in which God does not know all logico-mathematical truths. Moreover, knowing all logico-mathematical truths is certainly not the same as being omniscient. My response to the fourth objection therefore doesn't assume that God is possibly omniscient.

forget to scan some part of space-time, and so on. I would say that this doesn't constitute a problem for the argument. For, there is still at least one possible world in which it is in fact known that unicorns do not exist. Take a possible world W_2 in which God exists and in which God is alone since God decided not to create anything¹⁵. In that world God, being the solitary personal first cause of that world, does know that unicorns do not exist. Thus, my metaphysical principle cannot be invoked to conclude that unicorns exist. Note that an appeal to W_2 suffices to refute all kinds of similar objections, such as the objection that, if my principle would hold, it would follow that superman necessarily exists, or that there necessarily exists a flying teapot, or a spaghetti monster, etc. For, in W_2 , God knows that superman doesn't exist, and that there are no flying teapots, spaghetti monsters, etc. It is thus not impossible to know that superman doesn't exist, and that there are no flying teapots, spaghetti monsters, etc. Further, note that the appeal to possible world W_2 (or, for that matter, *any* possible world in which God exists) also refutes the objection that my principle could be used to infer the existence of an *impersonal* first cause. For, indeed, in W_2 God, being the *personal* first cause, knows that there is no *impersonal* first cause. So, it is not impossible to know that there is not an impersonal first cause. And, moreover, an appeal to W_2 (or, again, any possible world in which God exists) also refutes the objection that my principle entails pantheism. For, in any possible world in which God exists, God

¹⁵ One might object that God, being the first cause, should create something. I reply that the example can be understood as the situation in which God does not create anything *external to God*. In that case God can still be said to produce its own internal thoughts, being mental objects, and therefore God would still be the first cause of W_2 . Besides, we can also take as another example the possible situation in which God creates precisely one causally inert thing in W_2 , not being a unicorn. In that case the objection has no force either.

knows that pantheism¹⁶ is false. In fact my principle doesn't entail polytheism either. For, again, in every possible world in which God exists God, being the personal first cause of that world, obviously knows that polytheism is false. So it is not impossible to know that polytheism is false. Hence, to conclude, the modal-epistemic principle cannot be used to infer superman, unicorns, flying teapots, spaghetti monsters, impersonal first causes, pantheism or polytheism¹⁷. Indeed, the principle can only be used to infer a *personal first cause*: God. But, as one may finally reply, couldn't we say that both the propositions 'God is perfectly good' and 'God is not perfectly good' are impossible to know? But then the principle entails that God is necessarily perfectly good *and* necessarily not perfectly good, which is absurd, forcing us to abandon the principle after all. Again, I would say that none of these propositions is necessarily unknowable. Take a possible world W_3 in

¹⁶ Pantheism here understood as the worldview that there is no first cause because reality is assumed to be a single given 'holy', 'sacred' or even 'divine' uncaused whole of which everything that exists is a part.

¹⁷ Actually, since the propositions 'pantheism is true', 'there is an impersonal first cause' and 'polytheism is true' entail that God (understood as personal first cause) does not exist, it follows that these propositions are in fact necessarily unknowable as well. But then the proposed modal-epistemic principle in fact entails that pantheism and polytheism are false, and that an impersonal first cause does not exist. Indeed, precisely because my principle entails that God, personal first cause, exists, it also entails that the others are not true. Yet, one can also provide a *direct derivation* of the other claims. Take the claim that there is no impersonal first cause. This can be derived as follows. An impersonal first cause is not a person and hence not able to know that it is the impersonal first cause (since only persons can know things). Moreover, on the Cartesian view of knowledge, no person is able to know that there is an impersonal first cause, since there being an impersonal first cause is not something a person can establish by incorrigible empirical observation, a priori logical proof, immediate intuition or conclusive testimony. Hence it's impossible to know that there is an impersonal first cause. But then the main principle indeed implies that there is no impersonal first cause.

which God exists and in which God is perfectly good. In that world God knows that God is perfectly good. So, it is not impossible to know that God is perfectly good. The same reasoning holds for a possible world in which God is not perfectly good. But then it is not impossible to know that God is not perfectly good either, which concludes my refutation.

#6

Another objection would be to point out that the concept of 'God' might be logically self-contradictory, and if so, God doesn't exist. My response to this is that the concept of God, understood as *personal first cause*, that is, as uncaused being that is the direct or indirect cause of everything else, is in fact logically consistent. For, both 'person' and 'first cause' can plausibly be taken to be logically coherent concepts. Indeed, the concept of 'person' is an inherent part of our ordinary language, and the concept of a 'first cause' is not incoherent either. Moreover, both concepts, as I would argue, do not have any mutually conflicting attributes. But then they are independent from each other, so that the combined concept of 'personal first cause' does not result in a logical contradiction either. Therefore, unless someone provides a good reason for believing that this combined concept is nevertheless inconsistent, we are justified to hold that the concept of God is coherent. Indeed, for the objection to have force one would at least have to suggest some sketch of an a priori proof that the concept of God is logically contradictory, which, I take it, cannot be done if we restrict our definition of God to personal first cause. Further, this definition clearly does not require God to be omniscient, omnipotent, omnipresent or omnibenevolent. Hence, we do not need to assume that, say, 'omniscient personal first cause' or 'omnipotent personal first cause' are logically coherent concepts. For all we

know, these significantly more complex concepts might be incoherent. And if so, the modal-epistemic principle cannot be used to infer that there is an omniscient or omnipotent personal first cause¹⁸.

#7

Another objection might be that, *even if* the concept of God is logically consistent, so that there is no a priori logical proof for the claim that God doesn't exist, it might still be the case that it is not impossible to know that God doesn't exist. For, as the objection would go, there might be some omniscient being who knows everything, including the fact that God doesn't exist. To this objection my response is as follows. One cannot exclude God's existence by empirical incorrigible observation¹⁹, by immediate self-evident intuition or by conclusive testimony. Moreover, since the concept of God, that is, personal first cause, is logically coherent, one cannot exclude God's existence by a priori logical analysis either. But then, given that, on the Cartesian view of knowledge, a priori logical proof,

¹⁸ See for example Whitcomb (forthcoming). Whitcomb argues that omniscience is impossible. From that he concludes that God does not exist. But this doesn't follow if we define God as personal first cause. For, if omniscience would be impossible, it would follow that God is a *non-omniscient* personal first cause.

¹⁹ An opponent of the argument might perhaps say that there is a possible world in which a being B exists that is able to empirically observe every single thing that exists. But then, assuming that B hasn't observed God, it would follow that B knows that God does not exist. Yet, I would respond that, if B is not the first cause, and thus not the ultimate origin or ground of the world, B cannot know with sufficient certainty that B has seen everything that exists. For, B cannot rule out that B missed observing something. And therefore B cannot know that God does not exist. Indeed, only a subject that is the ultimate origin or absolute ground of the world might 'oversee' reality and thus might know what exists and what doesn't. All other subjects are simply not in the epistemic position to have such 'oversight' and therefore cannot have that knowledge.

empirical incorrigible experience, self-evident immediate intuition and certain conclusive testimony exhaust the ways by which any subject could *know* that God does not exist, it follows that it is indeed impossible to know that God does not exist. No agent can really eliminate the epistemic possibility that God exists. The belief that God does not exist thus always remains falsifiable. Hence, the second premise of the argument is properly warranted. In fact, it shows that there cannot be an omniscient being who knows that God does not exist! So, if an omniscient being exists, then it would have to know that God *does* exist²⁰. An example would be God Himself *if* God is omniscient.

#8

Another objection might be that, on the Cartesian view of knowledge, there is no possible world in which that world's God knows that God exists. For, as the objection has it, even God could be hallucinating or dreaming or being deceived, so that even God's belief that God exists is falsifiable. In order to provide a proper response to this objection I first say a bit more about the Cartesian conception of knowledge. The Cartesian conception can be understood as being an internalistic account of epistemic foundationalism for which the collection of foundational beliefs is restricted, in its most limited form, to propositions known by logical proof, incorrigible experience or immediate self-evident intuition. But then, on the Cartesian view, radical skepticism doesn't destroy all candidate instances of knowledge. For, even under hyperbolic doubt, there are instances of proper incorrigible

²⁰ It thus follows that omniscience entails (bare) theism. For, if there is an omniscient being, then, since it is impossible to know that God doesn't exist, this being doesn't know that God doesn't exist. But then, since the being is omniscient, it is not true that God doesn't exist. So God exists, which concludes the derivation.

or self-evident beliefs, such as "I exist", "I'm having at this very moment the experience of seeing red", " $1+1=2$ " or " $a=a$ ". So, the Cartesian view of knowledge does not require that everything we know must be discursively provable in an absolute sense.

On the other hand it is of course true, on the Cartesian view, that in many cases one is not justified to claim to know something. Yet, of all epistemic situations, the situation of *God believing that God exists*, is surely the most adequate, the most ideal, situation for which we would be justified to hold that the subject in question can be taken to be sufficiently certain about the proposition in question. Hence we are warranted to assert that in those possible worlds in which God exists, at least God can be said to know that God exists.

So, I think the objection can be refuted if we make use of the concept of ideal epistemic situation. There is no ideal epistemic situation in which some subject *S* is justified to hold that *S* has incorrigible access to the fact of there *not* being a God, whereas, there is in fact an ideal epistemic situation in which a subject *S* is justified to assert that *S* has certain access to the fact of there being a God, namely God in all possible worlds in which God exists. For, if *W* is a possible world in which God exists, then, in *W*, for God the belief that God exists can be taken to be self-evident or incorrigible, and thus a proper instance of knowledge under the Cartesian view. After all, there is an epistemically quite relevant difference between a world's God asserting that God exists, and, say, John asserting that God does not exist. For, in the former case God has direct access to its own mental states, whereas, in the second case, John does not have direct access to God (or to God's mental states). Thus, while the former case, God asserting that God exists, is properly referred to

as epistemic ideal, the second case is not epistemically ideal at all. Thus, on the Cartesian conception of knowledge, we are indeed sufficiently justified to hold that the former case is an adequate example of a foundational belief, whereas the second case isn't at all.

To put the point slightly differently, surely God, in those possible worlds in which God exist, knows that God exists. For, who else in that possible world could be in a better epistemic position regarding its very own existence than that possible world's God? So, it is definitely plausible to maintain that, if anyone, at least God knows that God exists. And for this we don't need God to be omniscient either. God is in fact a rather special being in the sense that God is the unconditional origin or ultimate ground of reality. And so, as being the absolute first cause of everything else that exists, God is in an ideal epistemic situation with respect to God's own identity. God's belief that God exists is therefore sufficiently incorrigible or basic. Indeed, God's belief that God exists is surely not less warranted than John's belief that John exists, or Mary's belief that Mary exists. So God's belief that God exists counts as knowledge, even under the Cartesian view²¹.

²¹ Under the Cartesian conception of knowledge God might be the *only* being that knows that God exists. On the other hand there might be possible worlds in which God exists and in which God is able to bring certain subjects in such an epistemic condition (for example by direct revelation) that they also come to know that God exists. Perhaps God is the only being that is able to bring other subjects in such a condition. Now, I would argue that direct revelation is indeed metaphysically possible. A subject S unequal to God can come to know that God exists by direct revelation from God towards S. This would be an instance of incorrigible experience and therefore an example of Cartesian knowledge. But then the first premise of my argument cannot be used to infer the absurd worldview that I am God, such as for example solipsism would have it. For, the proposition "I am not God" is not unknowable if we allow for direct revelation, and thus it does not follow that "I am God" is true. Yet, I take it that "I am not God" is surely knowable even without

#9

Opponents of the argument might want to say that the argument's appeal to the Cartesian conception of knowledge remains problematic. Now, as I argued above, it is certainly not the case that skepticism precludes Cartesian knowledge. For, as mentioned, the Cartesian conception does not require that everything known is absolutely provable. Take the claim that I exist. This is an instance of Cartesian knowledge, but not absolutely provable. Or take the claim that I have now such and such experiences. This is an instance of Cartesian knowledge as well, but again, not absolutely provable. Still, one might want to object that the first premise of the argument, the modal-epistemic principle, cannot be known to be true if we adopt the Cartesian view of knowledge. For, as the objection has it, the truth of this principle cannot be established by logical proof, incorrigible observation, self-evident intuition or conclusive testimony. However, this further objection doesn't succeed either. For, I'm definitely not claiming *to know* that the main principle is true. I'm only claiming that this principle is sufficiently plausible or reasonable to accept, so that we are justified to employ it as a premise in a reasonable (but not necessarily conclusive) argument for God's existence. Nevertheless, one might want to propose yet another, related, objection. This objection proceeds as follows. The argument is based on the Cartesian conception of knowledge. Although this conception indeed allows for instances of knowledge, it is also the case that the Cartesian conception is one of many feasible conceptions of knowledge. And, since no reason is given to adopt the Cartesian view instead of one of these others,

assuming the metaphysical possibility of direct revelation. For, we can of course plausibly assert that for me the proposition "I did not invent the universe" is an incorrigible true belief. Indeed, solipsism is absurd.

the whole argument is problematic after all. Does this objection hold? Now, surely, there are many accounts of knowledge, many views on what it means for a subject to know a proposition. But, as I respond, that doesn't imply that we do have to defend the Cartesian conception of knowledge against other alternative notions of knowledge. After all, the argument's premises are *about* Cartesian instances of knowledge, so we do not have to be Cartesians ourselves in order to accept them. In other words, we do not have to commit ourselves to the idea that the Cartesian conception of knowledge is the most adequate in order to claim that certain properties of this conception are plausibly true, such as those expressed by the two premises of the argument. Consider as an example the following analogy. We do not have to embrace the classic conception of beauty over others in order to accept certain assertions *about* this classic conception. By parallel reasoning, we don't have to embrace the Cartesian view of knowledge in order to accept premises about it. Indeed, someone who does not accept the Cartesian notion of knowledge might reason as follows: "I do not embrace the Cartesian conception of knowledge. I prefer another view on knowledge. Yet, I accept that, *if* some proposition is unknowable under the Cartesian conception, *then* that proposition is necessarily false". Thus, for believing a (conditional) claim *about* the Cartesian conception one doesn't have to embrace that conception *itself*. We can put this point also as follows. It is sufficient to affirm, from the *third person point of view*, that reality in itself is intelligible, that is to say, that each possible truth is known in the Cartesian sense in some possible world by some human or non-human subject, without having to become, from the *first person point of view*, Cartesian epistemologists

ourselves. Indeed, on *meta-level* we can plausibly accept the intrinsic intelligibility of reality without having to embrace ourselves on *object-level* a Cartesian epistemology²².

#10

Finally, opponents of the argument could try to refute the modal-epistemic principle upon which the argument is based by proposing cogent examples of *possibly true* propositions that are nevertheless *unknowable*. Take the claim that there is a diamond buried under thousand feet of granite that no one will ever find. Is this a proper counterexample to the principle? I would say it is not. For, there are many possible worlds in which it is in fact known that the diamond buried under thousand feet of granite exists. One could think of a possible world in which a human being, or perhaps some extraterrestrial intelligent being, discovers the diamond by using advanced technical equipment. One might respond that this will not do since the fact that no one will ever find the diamond is part of the claim's state of affairs. However, in that case I reply that the proposed state of affairs is not possible, since, as I pointed out, for *any* diamond buried under thousand feet of granite there will always be some possible world in which *that* specific diamond is discovered after all. Take as another suggested counterexample the claim that, due to the Heisenberg uncertainty principle of quantum mechanics, it is not possible to know the position and momentum of a particle simultaneously, yet particles *do* have a position and momentum. This counterexample also fails since there are metaphysically possible worlds in which

²² If we denote 'Proposition *p* is possibly knowable in a Cartesian sense' by CK(*p*) then the first premise of my argument can be rendered as 'For all *p*, if *p* is possibly true then CK(*p*)', while the second premise in that case becomes: 'not CK(God does not exist)'. These premises can be accepted by Cartesians and non-Cartesians. The premises entail that God necessarily exists, and this result does not refer to CK anymore.

quantum mechanics does not hold. Consider for example a classical Newtonian possible world W . In world W the position and momentum of all particles can be known²³. Let us consider another counterexample. Put a single die in a sealed opaque container and shake it. Now shake it again. It is impossible to know that after the first shake the number one was rolled, therefore the number one was not rolled. Similarly the number two was not rolled, etc. Hence, we can conclude that no face was rolled, which is absurd. Now, this alleged counterexample is inadequate as well. For, again, the modal-epistemic principle is not saying that everything that is true in our world can in fact be known in our world. Of course not, that would be unfounded. The principle has it instead that everything that is unknown in *all* logically possible worlds must be false. And the ‘dice’-example is not a counter example to this assertion. Indeed, it is quite easy to construct a logically possible world in which it is in fact known by some subject that after the first shake the number one was rolled. Take for example a possible world in which there is some extraterrestrial species that observes every event on earth (perhaps without us knowing it, although this is not relevant for the construction) and that is able to see through walls and other closed

²³ One might reply that the following conjunction still counts as a counterexample: ‘Quantum mechanics is true and elementary particle E has position P and momentum M ’. For, as one might say, this conjunction is necessarily unknowable, yet possibly true. I respond that this conjunction is not necessarily unknowable. For, take a possible world in which quantum mechanics is true and in which there exists an observer O that knows that quantum mechanics is true and that is able to observe E directly without having to rely on light waves. In that case O knows the aforementioned conjunction. But then this conjunction is not unknowable. Moreover, the conjunction is not a c -proposition, so that it is not a problem for the alternative rendering of my argument. Further on I introduce the notion of c -proposition and also present the alternative rendering.

surfaces. Such a world is logically possible, and therefore the proposition that the number one was rolled is not unknowable. Thus, this example doesn't refute the principle either.

Perhaps another kind of counterexample could help to refute the principle. Suppose that John considers the following proposition: 'God understands my atheism'. Now, as John could argue: "There is a possible world in which God exists, in which I am an atheist, and in which it is also true that God understands my atheism". So, as John concludes, the proposition "God understands my atheism" is possibly true. Yet, this proposition is surely unknowable. For, knowledge entails belief, and, no atheist can believe that God exists. Is this a convincing counterexample to the modal-epistemic principle? I would respond that, surely, no rational agent S can believe that God understands S's atheism. For, indeed, this belief would entail that God exists, which contradicts S's atheism. The proposition is thus an example of a principle that is a priori impossible to believe by any rational agent²⁴. Now, I take it that, in our formulation of the principle, we may reasonably preclude this sort of *logically* unbelievable propositions. In other words, we may reasonably restrict the scope of the principle to propositions *p* for which there is an agent in some possible world that could *rationally* believe *p*. As a similar alleged counterexample, take the proposition 'I do not exist'. One might argue that this proposition is possibly true. In fact, it was actually true at some time. Yet, that proposition cannot be known, since no one can know that he or she does not exist. I respond again that, of course, no rational agent S can reasonably believe that S does not exist. But then, given the aforementioned reasonable

²⁴ The proposition in question is a performative contradiction that cannot be rationally believed.

restriction of the principle's scope, that is, the restriction of the principle to propositions p that are possibly rationally believable, this second counterexample is inadequate as well.

As a last resort one may try to appeal to more 'construed' counterexamples, such as:

1. This proposition is unknown by anyone,
2. p and nobody knows p ,
3. There are no subjects,
4. There are no known propositions.

These alleged counterexamples are artificial. Take the first two. Why should we accept these self-referential or meta-propositions as convincing defeaters of the main principle? After all, I would argue that self-referential or meta-propositions easily lead to logical difficulties and should therefore be avoided. In addition, why should we believe that the third and fourth proposition are relevant for the question of whether the modal-epistemic principle holds? I answer that we should not since it seems more than reasonable to limit the modal-epistemic principle to possible worlds *in which at least some proposition is, or can be, known*. After all, there is no point at all in considering possible worlds that do not allow for knowledge. Indeed, if we exclude such possible worlds from the scope of the principle, then the principle does not become any less plausibly true. For, if a proposition p is *unknowable* in all possible worlds *that allow for knowledge*, then that proposition p is by definition also unknowable in all possible worlds *simpliciter*, and vice versa, if some proposition p is unknowable in all possible worlds *simpliciter*, then proposition p is of

course also unknowable in those possible worlds that allow for knowledge. So, in short, the above four alleged counterexamples are in fact nothing more than merely ‘loophole’ cases. We can easily avoid them by adopting a slightly alternative rendering of the main modal-epistemic principle. For that I need to introduce three supplementary definitions.

First, let a *c-state* be a concrete state of affairs of one or more concrete particulars, having each zero or more concrete properties, and all standing to each other in zero, one or more relationships. Second, let a *c-proposition* be a proposition that either affirms or denies there being a *c-state*, such as for example the propositions ‘Peter’s car is blue’, ‘Eva is a friend of Ed’, ‘There are no horses’, ‘There are people’, ‘God exists’ and ‘God does not exist’. Third, let a *K-world* be a possible world in which at least something is known. Now, only subjects (i.e., agents) can know things, thus a *K-world* is a world that contains one or more subjects. And, vice versa, a world that contains at least one subject is also a *K-world*. For, every subject *S* at least knows that *S* exists. Besides, according to the negative introspection axiom of S5 epistemic modal logic, if a subject *S* does not know *p*, then *S* knows that *S* does not know *p*. So, indeed, every subject knows at least something.

Given these definitions, the modal-epistemic principle can be rendered in the following way: ‘If *p* is a *c-proposition* that is true in at least one *K-world*, then there is a possible world in which *p* is known’. I would say that this principle is similar to the original one, except that it is more modest. For, it only applies to *c-propositions*, and its antecedent now requires that there must be a *K-world* in which *p* is true. Moreover, it seems more plausible than the original rendering. For the proposition *p* in the antecedent is quite basic in the sense that it is about concrete particulars. Besides, it is now required as well that *p*

is true in a possible world that contains subjects that are able to know propositions. So, in a sense, proposition p is “closer to” the logical possibility of there being a subject that in fact knows p . Further, it follows that the aforementioned four alleged counterexamples do indeed not refute the proposed alternative rendering of the principle. For, (1) and (2) are not c-propositions²⁵, and the other two, (3) and (4), cannot be true in a K-world^{26 27}.

²⁵ Indeed, since propositions are, plausibly, not concrete objects, (1) and (2) do not refer to concrete states of affairs, and are therefore not c-propositions. However, suppose one would like to argue that propositions are concrete objects. Would it then follow that (1) and (2) are c-propositions? Now, (1) might in that case perhaps be understood as a c-proposition. Yet, (1) is self-referential and could on that ground be excluded from the scope of the modal-epistemic principle. Proposition (2) on the other hand would also in that case not count as a c-proposition. For, ‘ p , but nobody knows p ’ would be a c-proposition only if it either affirms or denies there being some c-state. But, what would be the c-state affirmed or denied by ‘ p , but nobody knows p ’? It seems to me that there is no single c-state X such that ‘ p , but nobody knows p ’ either affirms X or denies X . Perhaps one might reply that ‘ p , but nobody knows p ’ both affirms the c-state expressed by ‘ p ’ and denies the c-state expressed by ‘There is somebody that knows p ’. Yet, this is not the same as either affirming or denying a *single* given c-state, which is what a c-proposition is by definition required to do.

²⁶ Of course (3) cannot be true in a K-world. Proposition (4) cannot be true in a K-world either, since, as mentioned, each subject knows at least one proposition. Thus each K-world contains known propositions.

²⁷ As another alleged counterexample one may point at the *Big Fact*, that is, the conjunction of all truths, and argue that the Big Fact is true in all possible worlds, yet unknowable since omniscience is impossible. However, by appealing to the alternatively rendered modal-epistemic principle we can refute this alleged counterexample without having to argue that omniscience is possible. For, the Big Fact is not a c-state. Another objection one may want to propose is that the first premise, that is, the claim that all possible truths are knowable, is *itself* unknowable, and therefore, if true, necessary false. However, I would argue that, plausibly, it is not metaphysically unknowable that all possible truths are knowable. For, God, if God exists, is the ultimate origin and ground of reality itself. But then it is conceivable that there is a possible

Now, let p be the c-proposition that God does not exist. As I argued before, there is no possible world in which p is known. Hence it follows that there is no K-world in which p is true. But then the principle entails that God exists in all K-worlds, including ours (since our world is obviously a K-world)²⁸. From this we see that the alternative rendering of the principle comes with a price. It no longer follows that God is a necessary being. After all, for all we know there might be one or more *non-K*-worlds, and in those worlds God (being a subject) does not exist. Nevertheless, it follows that God exists in our actual world, either necessarily or contingently. And this is surely sufficient to support theism.

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world in which God, the absolute source of being, in fact knows the essence of being, and thus could know that being is intelligible, i.e. that all possible truths are in fact knowable. Besides, the first premise is not a c-proposition, so this objection does not impose a problem for the alternative rendering of my argument.

²⁸ This consequence should perhaps not surprise us for a different reason as well. For, if there are conscious subjects, then, given the rather deep problems of ‘eliminative’, ‘reductive’ and ‘emergence’ explanations of consciousness, there does not seem to be a cogent naturalistic answer to what David J. Chalmers has coined the ‘hard problem of consciousness’ (Chalmers 1995). But then, the only sufficiently tenable explanation of the phenomenon of consciousness seems to be a personal one, and plausibly theistic. This line of reasoning is referred to as *the argument from consciousness*. See Moreland (2009) for a full and detailed account.

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